ABSTRACT

In one embodiment, the present invention provides a detection complex which is useful for detecting a specific analyte of interest in a sample. The complex comprises a detection marker indirectly connected to an analyte binding partner by a bridging complex. This arrangement serves to preserve or enhance the availability of analyte binding sites on the analyte binding partner and consequently enhances detection of the analyte. In some embodiments, the present invention provides a detection complex useful for detecting a specific antibody of interest in a sample. In accordance with one aspect of the present invention, methods are provided to detect one or more antibodies using a bridging complex comprising multimeric, dimeric, or chimeric molecules or particles each comprising an antigen and coupled to detection markers through the use of antibodies or a protein binding molecule, nucleic acid binding molecule, carbohydrate binding molecule or lipid binding molecule.